



SOT-89 Plastic-Encapsulated Transistors

2SA1740 TRANSISTOR (PNP)

FEATURES

Power dissipation

$$P_{CM} : 500 \text{ mW (Tamb=25°C)}$$

Collector current

$$I_{CM} : -200 \text{ mA}$$

Collector-base voltage

$$V_{(BR)CBO} : -400 \text{ V}$$

Operating and storage junction temperature range

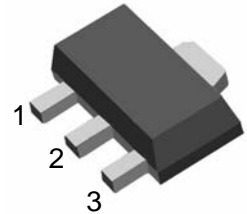
$$T_J, T_{stg}: -55°C \text{ to } +150°C$$

SOT-89

1. BASE

2. COLLECTOR

3. EMITTER



ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -10\mu A, I_E = 0$	-400			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1\text{mA}, I_B = 0$	-400			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -10\mu A, I_C = 0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB} = -300\text{V}, I_E = 0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -4\text{V}, I_C = 0$			-0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE} = -10\text{V}, I_C = -50\text{mA}$	60		200	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -50\text{mA}, I_B = -5\text{mA}$			-0.8	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -50\text{mA}, I_B = -5\text{mA}$			-1	V
Transition frequency	f_T	$V_{CE} = -30\text{V}, I_C = -10\text{mA}$		70		MHz
Collector output capacitance	C_{ob}	$V_{CB} = -30\text{V}, I_E = 0, f = 1\text{MHz}$		5		pF
Turn-ON Time	t_{on}	$V_{CC} = -150\text{V}, I_C = -50\text{mA},$ $I_{B1} = -I_{B2} = -5\text{mA}$		0.25		μs
Turn-OFF Time	t_{off}			5		μs

CLASSIFICATION OF $h_{FE(1)}$

Rank	D	E
Range	60-120	100-200
Marking	AK	